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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/520,804	01/10/2005	Jens Pollmann-Retsch	DE 020173	9925	
24737	7590 06/15/2006		EXAMINER		
PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			WALFORD, NATALIE K		
			ART UNIT	PAPER NUMBER	
	- ,		2879		
			DATE MAILED: 06/15/200	6	

Please find below and/or attached an Office communication concerning this application or proceeding.

					1.			
		Application	No.	Applicant(s)				
		10/520,804		POLLMANN-RETSCH ET AL.				
	Office Action Summary	Examiner		Art Unit				
		Natalie K. W		2879				
Period fo	The MAILING DATE of this commun or Reply	nication appears on the c	over sheet with the c	correspondence a	ddress			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD IN CHEVER IS LONGER, FROM THE IN Insions of time may be available under the provision SIX (6) MONTHS from the mailing date of this composed in the provision of period for reply is specified above, the maximum is the toreply within the set or extended period for reply reply received by the Office later than three months ed patent term adjustment. See 37 CFR 1.704(b).	MAILING DATE OF THIS s of 37 CFR 1.136(a). In no event, munication. tatutory period will apply and will ex y will, by statute, cause the applica	COMMUNICATION however, may a reply be tin xpire SIX (6) MONTHS from tion to become ABANDONE	N. nely filed the mailing date of this o D (35 U.S.C. § 133).				
Status								
1)[\	Responsive to communication(s) fil	ed on 10 January 2005						
·		2b)⊠ This action is non	-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims							
5)□ 6)⊠ 7)□	Claim(s) 1-9 is/are pending in the a 4a) Of the above claim(s) is/a Claim(s) is/are allowed. Claim(s) 1-9 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restrict	are withdrawn from consi						
Applicat	ion Papers							
10)⊠	The specification is objected to by the drawing(s) filed on 10 January of Applicant may not request that any objected the oath or declaration is objected to	$2005$ is/are: a) $\square$ accept ection to the drawing(s) be light the correction is required	held in abeyance. See if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 C	FR 1.121(d).			
Priority (	under 35 U.S.C. § 119							
12)⊠ a)	Acknowledgment is made of a claim  All b) Some * c) None of:  1. Certified copies of the priority  2. Certified copies of the priority  3. Copies of the certified copies application from the Internation	or documents have been represented to documents have been represented to the priority document onal Bureau (PCT Rule 1	received. received in Applicati s have been receive 17.2(a)).	on No ed in this Nationa	l Stage			
	ce of References Cited (PTO-892)	4)	Interview Summary					
3) 🔀 Infor	ce of Draftsperson's Patent Drawing Review ( mation Disclosure Statement(s) (PTO-1449 o er No(s)/Mail Date <u>1/05 and 10/05</u> .	r PTO/SB/08) 5)	Paper No(s)/Mail Dail Dail Notice of Informal Part Date:		O-152)			

#### **DETAILED ACTION**

#### **Priority**

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### Claim Objections

Claim 3 and 7 are objected to because of the following informalities:

Claim 3 recites the limitation "the velocity" in the first line of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "the discharge vessel" in the second line of the claim.

There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakugi (JP 05-054862).

Regarding claim 1, Sakugi discloses a discharge lamp having a reflector and cooling means in figure 1, which cooling means has at least one nozzle (item 5 and 9) through which a flow of gas can be directed onto the discharge lamp, wherein the at least one nozzle is arranged

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such that it does not extend, at least to any substantial degree, into a beam path produced by the lamp (item 1) and the reflector (item 7).

Regarding claim 2, Sakugi discloses a discharge lamp as claimed in claim 1, wherein the at least one nozzle is inserted in a hole in the reflector (FIG. 1).

Regarding claim 3, Sakugi discloses a discharge lamp as claimed in claim 1, wherein the velocity of the flow of gas emerging from the at least one nozzle is of a value such that a turbulent flow (paragraph 11) is produced that surrounds at least part of the lamp.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4-5 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakugi (JP 05-054862).

Regarding claim 4, Sakugi discloses a discharge lamp as claimed in claim 1, but does not expressly disclose that at least two nozzles are at an angle to one another are directed at the discharge lamp such that a turbulent flow is produced that surrounds at least part of the lamp, as claimed by Applicant. Sakugi does disclose that one nozzle can be for cooling and ventilating the front of the arc tube, without degrading the color property (paragraphs 8-9). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have more than one nozzle, since it has been held that mere duplication of essential working parts of a device involves only routine skill in the art.

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Regarding claim 5, Sakugi discloses a discharge lamp as claimed in claim 4, wherein the nozzles are at an angle of approximately 90° to one another (FIG. 1).

Regarding claim 7, Sakugi discloses a discharge lamp as claimed in claim 1, wherein at least one first nozzle (items 5 and 9) is directed at a region of the discharge vessel that is at the top in the position in which the discharge lamp is operating (FIG. 1), but does not expressly disclose that at least one second-nozzle is directed at a region of the discharge vessel that is at the bottom in this same operating position, as claimed by Applicant. Sakugi does disclose that one nozzle can be for cooling and ventilating the front of the arc tube, without degrading the color property (paragraphs 8-9). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have more than one nozzle at the bottom of the reflector in the same operating position as the first nozzle, since it has been held that mere duplication of essential working parts of a device involves only routine skill in the art.

Regarding claim 8, Sakugi discloses a discharge lamp as claimed in claim 7, wherein the velocity of the flow of gas passing through at least one of the nozzles (items 5 and 9) can be controlled as a function of the operating position of the discharge lamp (FIG. 1).

Claim 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakugi (JP 05-054862) in view of Kaneko et al. (JP 10-125287).

Regarding claim 6, Sakugi discloses a discharge lamp as claimed in claim 1, but does not expressly disclose that a first sensor is arranged adjacent to at least one of the nozzles to sense the velocity and/or the pressure and/or the flow-rate of a flow of gas passing through the nozzle, as claimed by Applicant. Kaneko is cited to show a discharge lamp in figures 1 and 5, with a

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first sensor (item 25) arranged adjacent to at least one of the nozzles (item 19) to sense the velocity and/or the pressure and/or the flow-rate of a flow of gas passing through the nozzle. Kaneko teaches that the lamp cooling means can help control the luminescence properties, aging is decreased, and controlling vapor pressure properties (paragraph 7).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Saluki's invention to include a first sensor arranged adjacent to at least one of the nozzles to sense the velocity and/or the pressure and/or the flow-rate of a flow of gas passing through the nozzle, as suggested by Kaneko for controlling the luminescence properties, decreasing aging, and controlling vapor pressure properties.

Regarding claim 9, Sakugi discloses a discharge lamp as claimed in claim 7, but dos not expressly disclose that a second sensor is provided to sense the operating position of the discharge lamp and to control the velocity of the flow of gas passing through at least one of the nozzles as a function of the operating position, as claimed by Applicant. Kaneko is cited to show a discharge lamp in figures 1 and 5, with a second sensor (item 25) is provided to sense the operating position of the discharge lamp (item 17) and to control the velocity of the flow of gas passing through at least one of the nozzles (item 19) as a function of the operating position. Kaneko teaches that the lamp cooling means can help control the luminescence properties, aging is decreased, and controlling vapor pressure properties (paragraph 7).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Sakugi's invention to include a second sensor provided to sense the operating position of the discharge lamp and to control the velocity of the flow of gas passing through at least one of the nozzles as a function of the operating position, as suggested

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by Kaneko for controlling the luminescence properties, decreasing aging, and controlling vapor pressure properties.

#### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalie K. Walford whose telephone number is (571)-272-6012. The examiner can normally be reached on Monday-Friday, 8 AM - 4:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571)-272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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